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## DD4b5.3 Coding Sequence

Length 2563 bp

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GGCGCGGGCAGGTCGGAGCTCGGAGCTGCTGCTTCTGGTTCTCTTGTGGCCACCGTCGCT
1  -----+-----+-----+-----+-----+-----+-----+ 60
   R G Q V G A R S C C F W F S C G H R R C -
GTCCGGCTGCCTTGGGCTGCCGAACAGACAAGGCGTGGGCCACAGCACCTCAGAAGCCGA
61  -----+-----+-----+-----+-----+-----+-----+ 120
   P A A L G C R T D K A W A T A P Q K P T -
CGCAGCTCGACGCAGGGGCGGCGAGGAGGGTGGGCGATCGCGTGTCTGGAGGGCGCCGCGC
121 -----+-----+-----+-----+-----+-----+-----+ 180
   Q L D A G A G R R V G D R V S E G A A R -
GGGCAGGCGGGCGGGCGCCAGAGGGGGAAGAGGCGGGGGCGGCGGGTCAGCCGCTGGCC
181 -----+-----+-----+-----+-----+-----+-----+ 240
   A G G R A P E G E R G G G G G S A A G R -
GGGCCGGCGGGGGAATGTCGATGCCTGACGCGATGCCGCTGCCCGGGGTCGGGGAGGAGC
241 -----+-----+-----+-----+-----+-----+-----+ 300
   A G G G M S M P D A M P L P G V G E E L -
TGAAGCAGGCCAAGGAGATCGAGGACGCCGAGAAGTACTCCTTCATGGCCACCGTCACCA
301 -----+-----+-----+-----+-----+-----+-----+ 360
   K Q A K E I E D A E K Y S F M A T V T K -
AGGCGCCCAAGAAGCAAATCCAGTTTGCTGATGACATGCAGGAGTTCACCAAATTCCTCA
361 -----+-----+-----+-----+-----+-----+-----+ 420
   A P K K Q I Q F A D D M Q E F T K F P T -
CCAAACTGGCCGAAGATCTTTGTCTCGCTCGATCTCACAGTCTCCACTGACAGCTACA
421 -----+-----+-----+-----+-----+-----+-----+ 480
   K T G R R S L S R S I S Q S S T D S Y S -
GTTTCAGCTGCATCCTACACAGATAGCTCTGATGATGAGGTTTCTCCCCGAGAGAAGCAGC
481 -----+-----+-----+-----+-----+-----+-----+ 540
   S A A S Y T D S S D D E V S P R E K Q Q -
AAACCAACTCCAAGGGCAGCAGCAATTTCTGTGTGAAGAACATCAAGCAGGCAGAATTTG
541 -----+-----+-----+-----+-----+-----+-----+ 600
   T N S K G S S N F C V K N I K Q A E F G -
GACGCCGGGAGATTGAGATTGCAGAGCAAGACATGTCTGCTCTGATTTCACTCAGGAAAC
601 -----+-----+-----+-----+-----+-----+-----+ 660
   R R E I E I A E Q D M S A L I S L R K R -
GTGCTCAGGGGGAGAAGCCCTTGGCTGGTGCTAAATAGTGGGCTGTACACACATCACAG
661 -----+-----+-----+-----+-----+-----+-----+ 720
   A Q G E K P L A G A K I V G C T H I T A -
CCCAGACAGCGGTGTTGATTGAGACACTCTGTGCCCTGGGGGCTCAGTGCCGCTGGTCTG
721 -----+-----+-----+-----+-----+-----+-----+ 780
   Q T A V L I E T L C A L G A Q C R W S A -
CTTGTAACATCTACTCAACTCAGAATGAAGTAGCTGCAGCACTGGCTGAGGCTGGAGTTG
781 -----+-----+-----+-----+-----+-----+-----+ 840
   C N I Y S T Q N E V A A A L A E A G V A -
CAGTGTTCTGCTTGAAGGGCGAGTCAGAAGATGACTTCTGGTGGTGTATTGACCGCTGTG
841 -----+-----+-----+-----+-----+-----+-----+ 900
   V F A W K G E S E D D F W W C I D R C V -
TGAACATGGATGGGTGGCAGGCCAACATGATCCTGGATGATGGGGGAGACTTAACCCACT
901 -----+-----+-----+-----+-----+-----+-----+ 960
   N M D G W Q A N M I L D D G G D L T H W -
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FIG. 1

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GGGTTTATAAGAAGTATCCAAACGTGTTTAAGAAGATCCGAGGCATTGTGGAAGAGAGCG  
961 -----+ 1020  
V Y K K Y P N V F K K I R G I V E E S V -

TGACTGGTGTTCACAGGCTGTATCAGCTCTCCAAAGCTGGGAAGCTCTGTGTTCCGGCCA  
1021 -----+ 1080  
T G V H R L Y Q L S K A G K L C V P A M -

TGAACGTCAATGATTCTGTTACCAAACAGAAGTTTGATAACTTGTACTGCTGCCGAGAAT  
1081 -----+ 1140  
N V N D S V T K Q K F D N L Y C C R E S -

CCATTTTGGATGGCCTGAAGAGGACCACAGATGTGATGTTTGGTGGGAAACAAGTGGTGG  
1141 -----+ 1200  
I L D G L K R T T D V M F G G K Q V V V -

TGTGTGGCTATGGTGAGGTAGGCAAGGGCTGCTGTGCTGCTCTCAAAGCTCTTGGAGCAA  
1201 -----+ 1260  
C G Y G E V G K G C C A A L K A L G A I -

TTGTCTACATTACCGAAATCGACCCCATCTGTGCTCTGCAGGCCTGCATGGATGGGTTC  
1261 -----+ 1320  
V Y I T E I D P I C A L Q A C M D G F R -

GGGTGGTAAAGCTAAATGAAGTCATCCGGCAAGTCGATGTCGTAATAACTTGCACAGGAA  
1321 -----+ 1380  
V V K L N E V I R Q V D V V I T C T G N -

ATAAGAATGTAGTGACACGGGAGCACTTGGATCGCATGAAAAACAGTTGTATCGTATGCA  
1381 -----+ 1440  
K N V V T R E H L D R M K N S C I V C N -

ATATGGGCCACTCCAACACAGAAATCGATGTGACCAGCCTCCGCACTCCGGAGCTGACGT  
1441 -----+ 1500  
M G H S N T E I D V T S L R T P E L T W -

GGGAGCGAGTACGTTCTCAGGTGGACCATGTGATCTGGCCAGATGGCAAACGAGTTGTCC  
1501 -----+ 1560  
E R V R S Q V D H V I W P D G K R V V L -

TCCTGGCAGAGGGTCGTCTACTCAATTTGAGCTGCTCCACAGTTCCACCTTTGTTCTGT  
1561 -----+ 1620  
L A E G R L L N L S C S T V P T F V L S -

CCATCACAGCCACAACACAGGCTTTGGCACTGATAGAACTCTATAATGCACCCGAGGGGC  
1621 -----+ 1680  
I T A T T Q A L A L I E L Y N A P E G R -

GATACAAGCAGGATGTGTACTTGCTTCCTAAGAAAATGGATGAATACGTTGCCAGCTTGC  
1681 -----+ 1740  
Y K Q D V Y L L P K K M D E Y V A S L H -

ATCTGCCATCATTTGATGCCCCACCTTACAGAGCTGACAGATGACCAAGCAAAATATCTGG  
1741 -----+ 1800  
L P S F D A H L T E L T D D Q A K Y L G -

GACTCAACAAAAATGGGCCATTCAAACCTAATTATTACAGATACTAATGGACCATACTAC  
1801 -----+ 1860  
L N K N G P F K P N Y Y R Y \*

CAAGGACCAGTCCACCTGAACCACACACTCTAAAGAAATATTTTTTAAGATAACTTTTAT  
1861 -----+ 1920

TTTCTTCTTACTCCTTTCCTCTTGATTTTTTTCCTATAATTTTATTCTTGTTTTTTCATC  
1921 -----+ 1980

TCATTATCCAAGTTCTGCAGACCACACAGGAAGTTGCTTCATGGCTCTTTAGATGAAATA  
1981 -----+ 2040

FIG 1 (cont)

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GAAGTTCAGGGTCCCTCACTCTAGTCACTAAAGAAGGATTTTACTCCCCCAGCCCAGAAA  
2041 -----+-----+-----+-----+-----+-----+ 2100

GGTGATTCTTCTCTTTACCATTTCTGGGGACTTTAGTCTTAATTAGGTACCTTATTAACA  
2101 -----+-----+-----+-----+-----+-----+ 2160

GGAAATGCTAAGGTACCTTCTCTGTGGAACAATCTGCAATGTCTAAATCGCCTTAAAAGA  
2161 -----+-----+-----+-----+-----+-----+ 2220

GCCCATTTCTTAGCTGCTGAAATCAGTGCTCTTTCACCTCTTCAGAGAAGCAGGGATGGT  
2221 -----+-----+-----+-----+-----+-----+ 2280

ACCTACCCGGCAGGTAGGTTAGATGTGGGTGGTGCATGTTAATTTCCCTTAGAAGTTCCA  
2281 -----+-----+-----+-----+-----+-----+ 2340

AGCCCTGTTTCCTGCGTAAAGGTGGTATGTCCAGTTCAGAGATGTGTATAATGAGCATGG  
2341 -----+-----+-----+-----+-----+-----+ 2400

CTTGTTAAGATCAGGAGGCCCACTTGGATTTATAGTATAGCCCTTCCTCCACTCCCACCA  
2401 -----+-----+-----+-----+-----+-----+ 2460

GACTTGCTCATTTTTTCGAGTTTTTAACTAGACTACACTCTATTTGAGTTTAATTTTGTCC  
2461 -----+-----+-----+-----+-----+-----+ 2520

TCTAGGATTTATTTCTGTTGTCCAAAAAAAAAAAAAAAAAAAAA  
2521 -----+-----+-----+-----+-----+----- 2563

FIG 1 (Cont)

Alignment of DD4b5.3 AHCY-like domain with full-length AHCY amino acid sequences of human (hu), mouse (mu) and drosophila (dr).  
Noted are conserved features shown to be important for AHCY function



FIG 2

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## DD4b5.3 sequence schematic

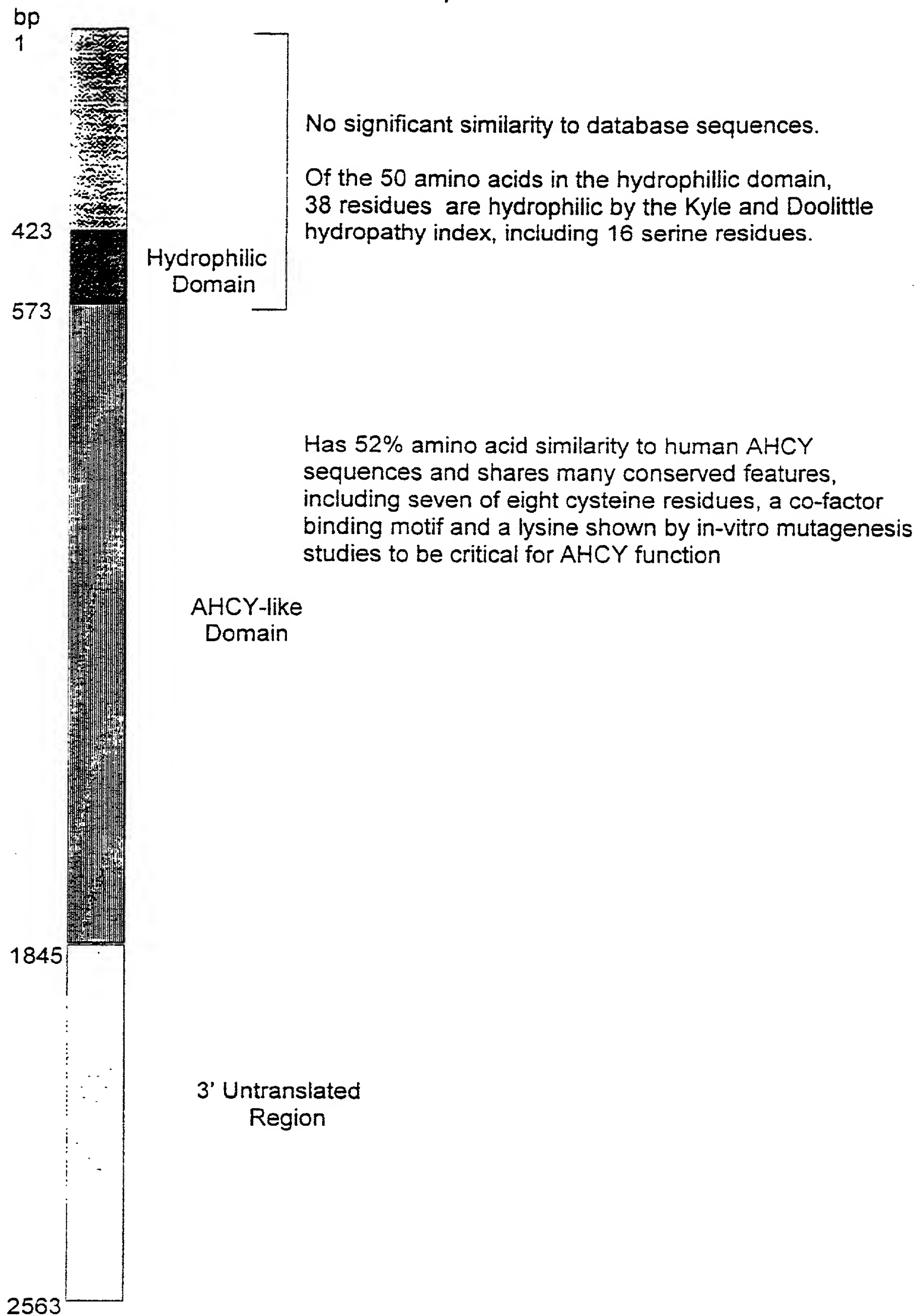
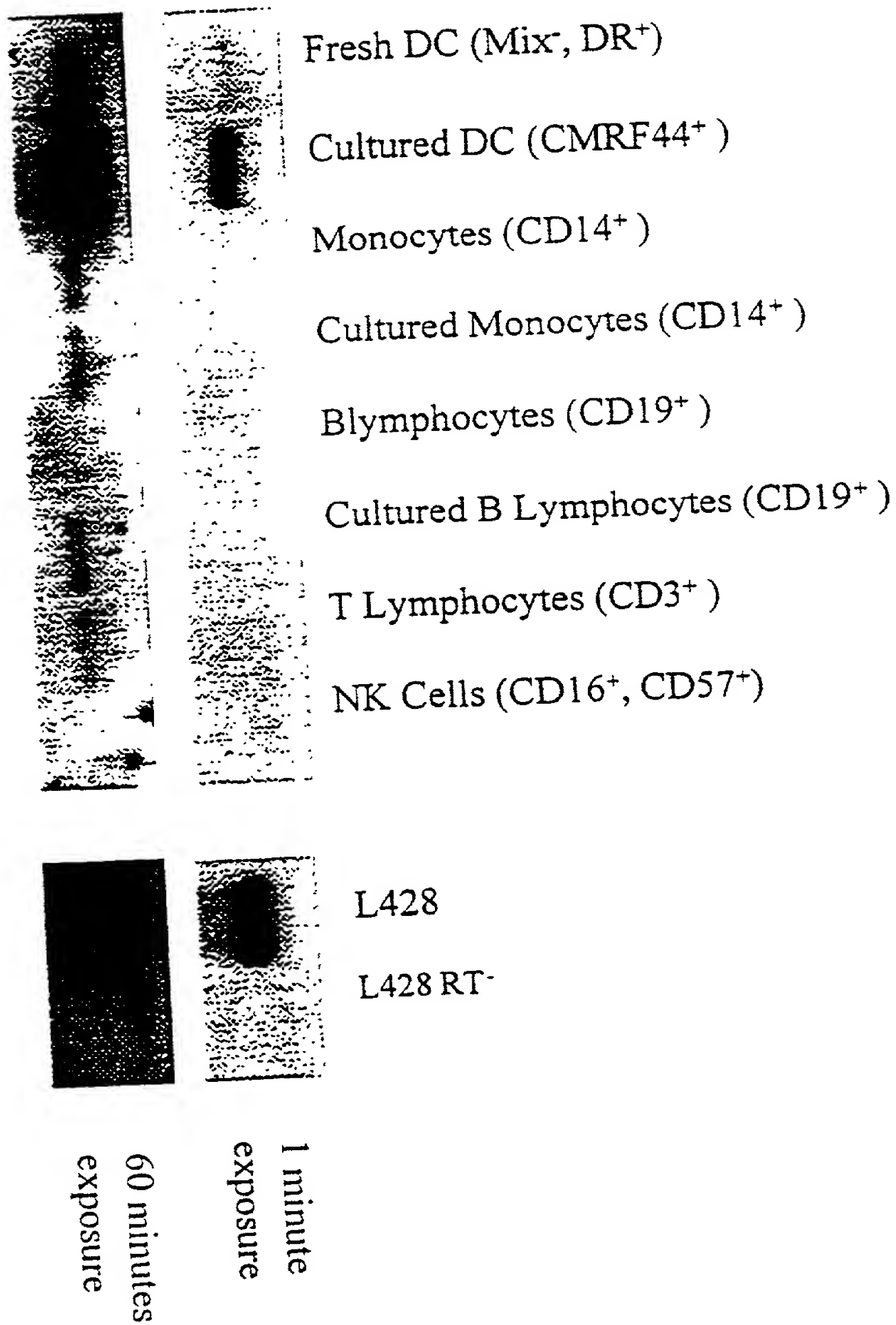


FIG 3



Southern blot analysis of DD4b5.3 RT-PCR results

FIG 4



Expression of DD4b5.3 in DC lineage panel, as assessed by RT-PCR

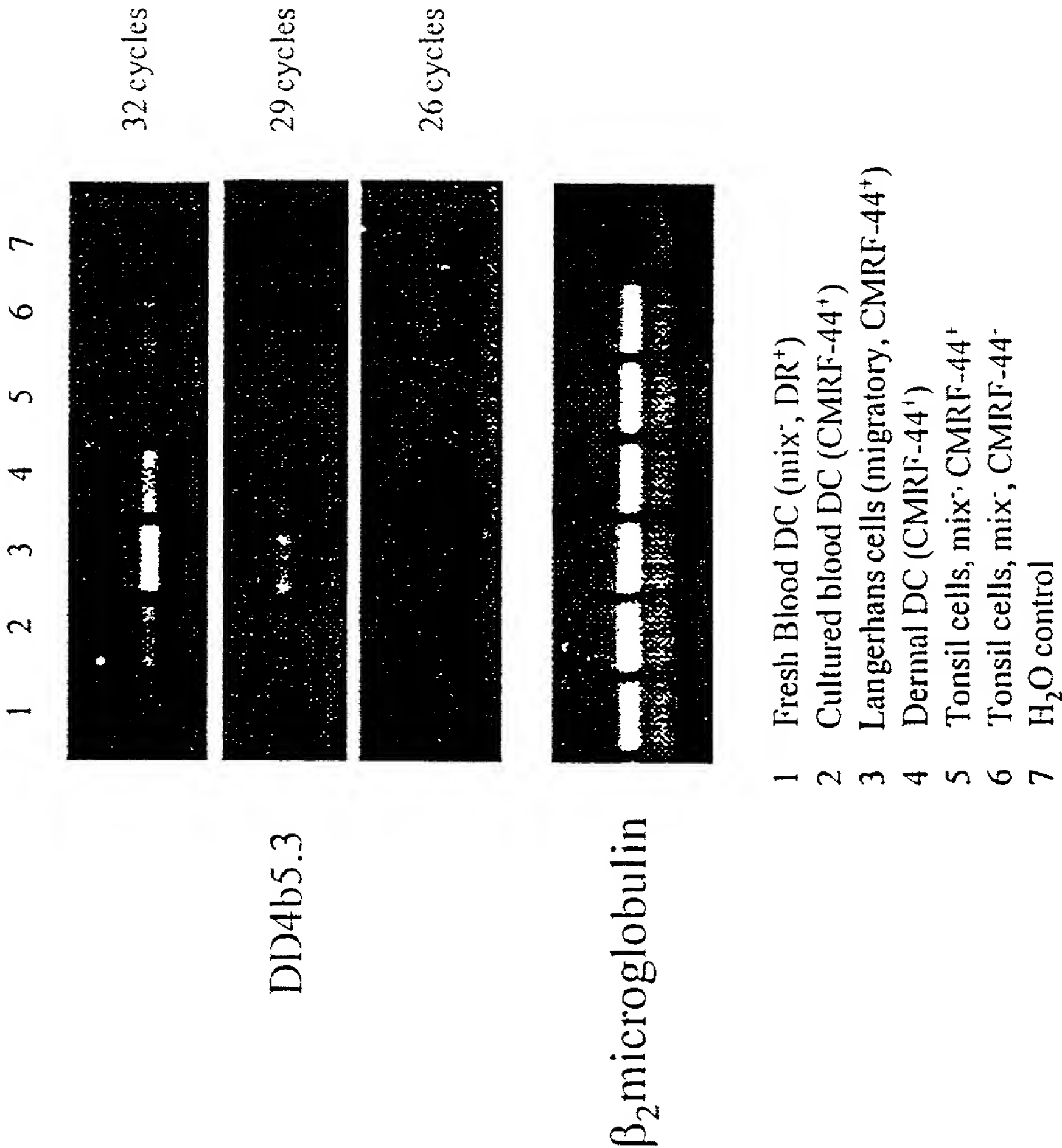


FIG 5

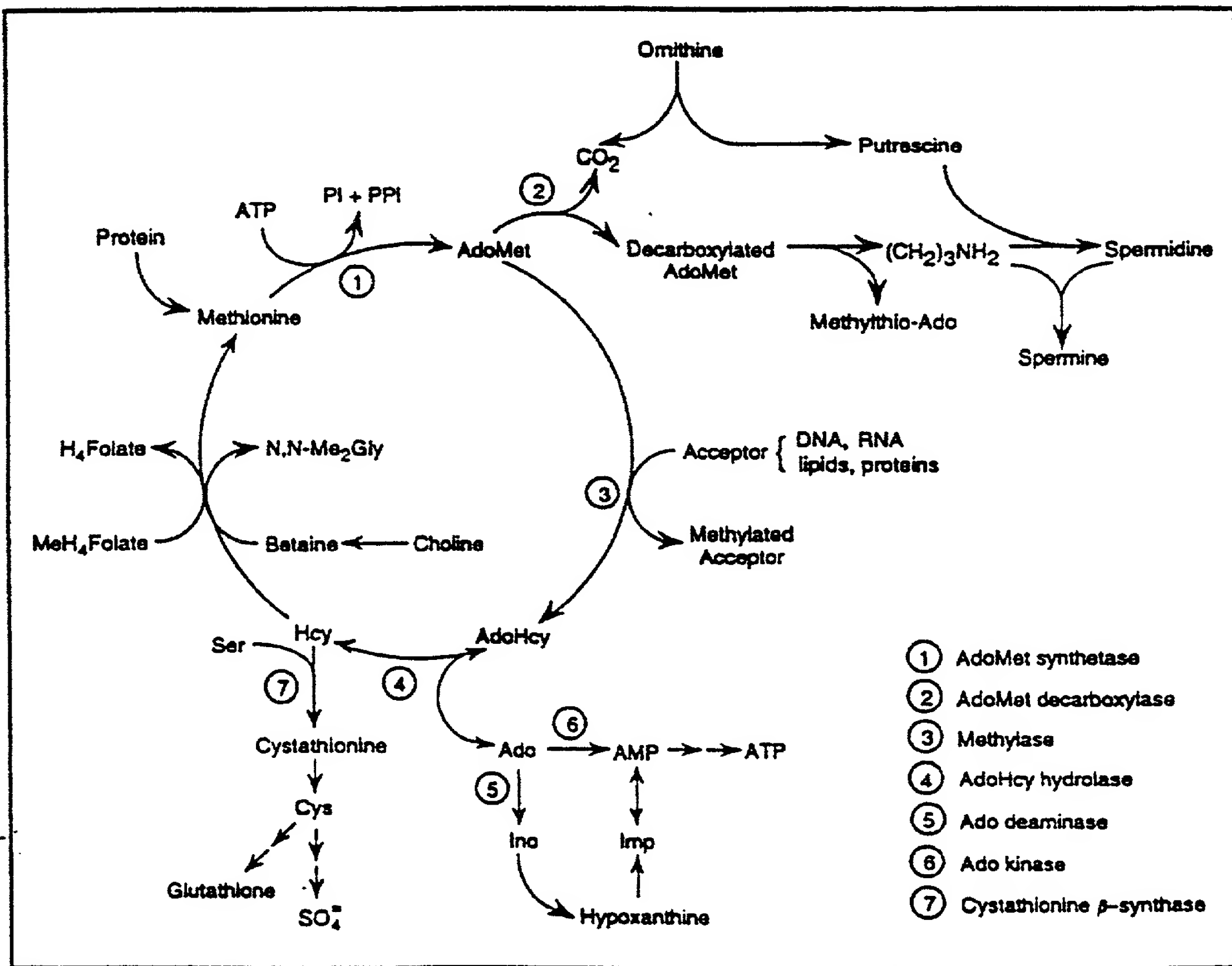


FIG 6



# RAP-PCR Method

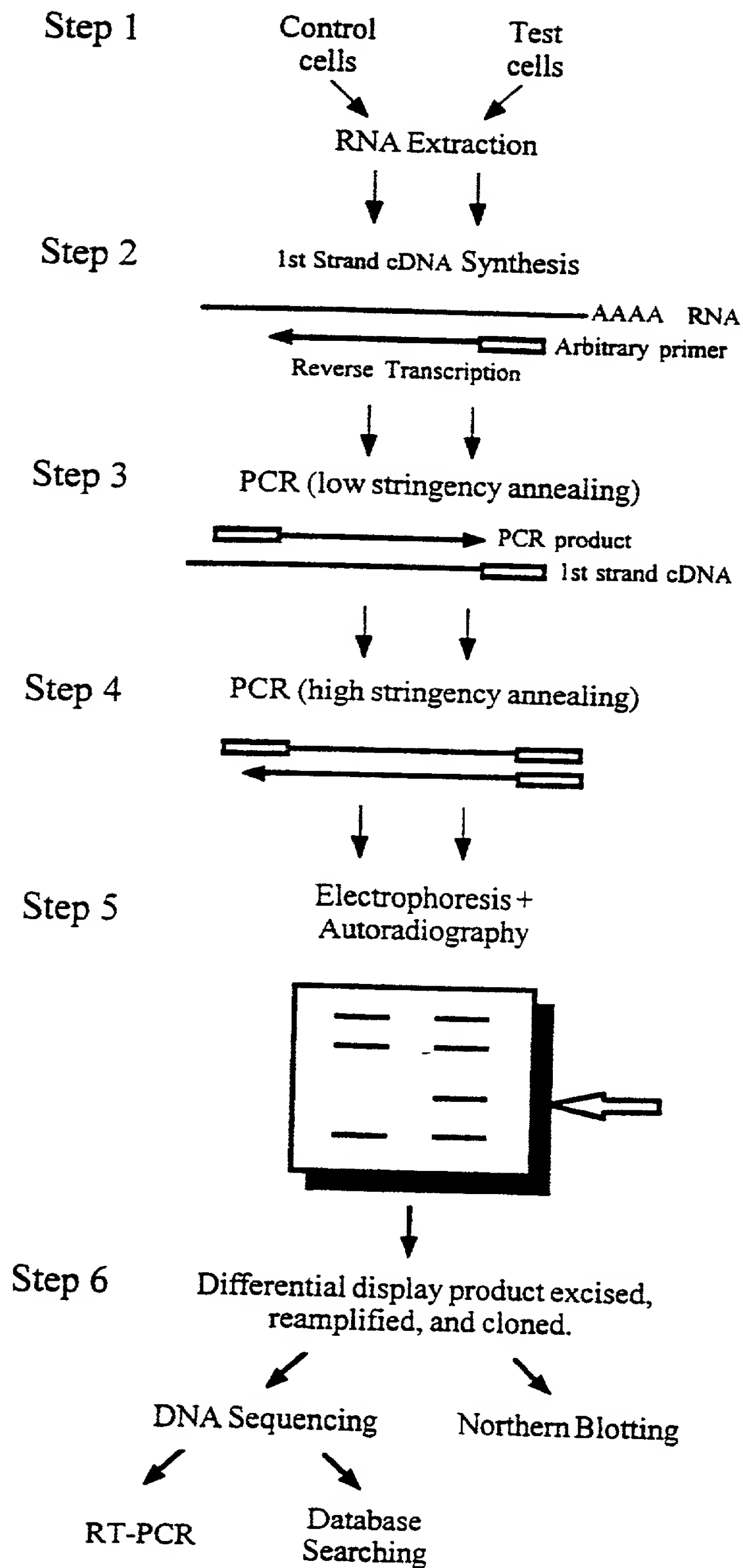


FIG 7